



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,865	10/12/2001	Shin Chin Lee	3626-0226P	7392

2292 7590 05/03/2004

BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER

ZHOU, TING

ART UNIT	PAPER NUMBER
----------	--------------

2173

3

DATE MAILED: 05/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/974,865

Applicant(s)

LEE, SHIN CHIN

Examiner

Ting Zhou

Art Unit

2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities: the use of "invalidate rectangle" on line 13 of page 3 of Specification is grammatically incorrect. It is suggested that the phrase be changed to -- invalidated rectangle --.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-4, 7-9 and 12-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Trower, II et al. U.S. Patent 6,121,981.

Referring to claims 1, 7 and 12, Trower, II et al. teach a method, module and computer readable storage medium comprising loading a plurality of frames (column 5, line 22, column 6, lines 40-43 and further shown in Figure 3), each of the plurality of frames comprising at least one object having a non-rectangle shape when outputting to a display (frames enclose an arbitrary-shaped animation) (column 5, lines 32-34); receiving an invalidated rectangle in a specific frame among the plurality of frames, the invalidated rectangle representing a rectangular area whose contents have changes between the specific frame and its immediate previous frame (bounding region used to play a sequence of animation) (column 5, lines 31-41); redrawing the graphic contents in the invalidated rectangle; outputting the specific frame to a display; setting the next frame of the specific frame as the specific frame; and repeating the above steps to generate an arbitrary-shaped dynamic user interface (column 2, lines 39-53 and column 27, lines 28-56). This is further shown in Figures 2-4 and 7.

Referring to claims 2, 8 and 13, Trower, II et al. teach computing a boundary of the non-rectangular object (rectangular area enclosing the arbitrary-shaped animation) (column 5, lines 32-34).

Referring to claims 3 and 14, Trower, II et al. teach establishing an invalidated rectangle list, wherein the invalidated rectangle of the specific frame is obtained from the invalidated rectangle list (sequence list of animation frames) (column 3, lines 3-5 and column 8, lines 53-65 and further shown in Figure 5).

Referring to claims 4, 9 and 15, Trower, II et al. teach cutting the invalidated rectangle into a plurality of line segments (scanning the bitmap one line at a time), scanning each of the line segments for non-transparent pixels, combining the non-transparent pixels in the line segments and refreshing the pixel contents of the invalidated rectangle using the combined result from the non-transparent pixels of the line segments (column 10, lines 27-41). This is further recited in column 27, lines 64-67 and column 28, lines 1-6 and shown in Figure 7.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 5-6, 10-11 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trower, II et al. U.S. Patent 6,121,981.

Referring to claims 5-6, 10-11 and 16-17, Trower, II et al. teach the use of bitmaps to represent graphic objects (Trower, II et al.: column 5, lines 20-41). Although Trower, II et al. do not explicitly teach the graphic objects being vector graphic and Flash objects, it would have been obvious that the graphics of the system can be represented by a plurality of compression formats, such as bitmaps, vector graphic and Flash objects. The examiner takes Official Notice of this teaching. It would have been obvious to one of ordinary skill in the art to represent the

graphic objects taught by Trower, II et al. in other type of formats such as vector graphic and Flash objects in order to develop rich content that is interactive, versatile and supported by a majority of system machines.

4. The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach similar methods for creating animated graphical elements.

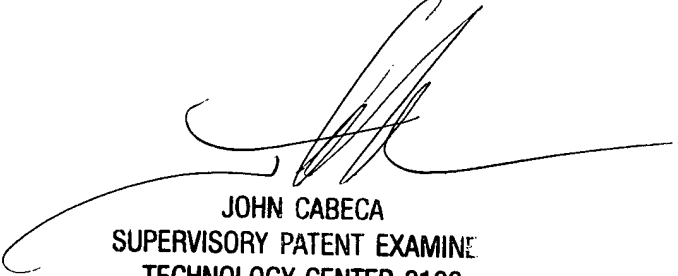
#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ting Zhou whose telephone number is (703) 305-0328. The examiner can normally be reached on Monday - Friday 8:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (703) 308-3116. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 27, 2004



JOHN CABECA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100